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## COSMETIC AGENT FOR SKIN

### CLAIM(S)

- 1) A cosmetic agent for skin that contains a far-infrared radiating ceramic powder.

### DETAILED DESCRIPTION OF THE INVENTION

The present invention pertains to a cosmetic agent in form of cream, facial pack, solid cosmetic agent, and emulsion.

#### (Prior Art)

A massaging cream and a facial pack have an effect of moisturizing skin by activating the skin. To further enhance such an effect, it can be considered that a blood circulation-activating agent such as camphor, hot pepper, and arunigai [Transliteration for not being able to locate in dictionaries] oil can be added.

(Problems of the Prior Art)

However, if a blood circulation-activating agent is added too much to enhance the expected effect, the stimulation to the skin will be too strong, which makes the cosmetic agent unsuitable.

Also, in the season from fall to winter when air is dry, people will feel skin irritation and dry skin even after the cosmetic agent is applied.

The present invention, to solve the aforementioned problems with the prior art cosmetic agent for skin, attempts to present a cosmetic agent for skin that can improve blood circulation in the skin without stimulating the skin while preventing the skin irritation and dryness.

(Means to Solve the Problems)

The inventors of the present invention, after having assiduously studied the aforementioned subject, found that use of a cosmetic agent containing a far-infrared radiating ceramic powder improves the blood circulation without strongly stimulating the skin, moisturizes, and smoothens the skin; thereby producing the present invention.

More specifically, the present invention pertains to a cosmetic agent for skin that contains a far-infrared radiating ceramic powder.

As for the far-infrared radiating ceramic powder, there can be cited for example: oxides of zirconia, titanium, alumina, and silica, and their

admixtures; a blackened group by adding manganese, iron, cobalt, and nickel to them. Mixing such a far-infrared radiating ceramic powder in the cosmetic agent, such as a massaging cream, facial pack, and foundation powder, accomplishes the aforementioned objective. The particle size of powder is preferably about 0.1 - 20  $\mu\text{m}$ .

The amount to be mixed is not limited to a specific amount but can be properly determined according to the types of cosmetic agent, usage. Generally, it is 0.1 - 30% relative to the basic component of the cosmetic agent, more preferably, 2 - 15%.

If far-infrared ray is further radiated or a warm towel is applied to skin after using the aforementioned cosmetic agent for skin, far-infrared can easily penetrate into the skin, enhancing the effect more.

#### (Operation)

Since the present invention is structured as above, when the cosmetic agent for skin, such as a massaging cream, a thermal cream, and a facial pack, of the present invention is used, the far-infrared radiated from the contained far-infrared radiating ceramic powder penetrates deep into a body, warming up the body from inside, effectively expanding peripheral veins, improving blood circulation, activating metabolism; thereby moisturizing

and smoothening the skin. More extensively, such a comprehensive operation working on a body is useful for age-retarding effect.

(Embodiment Example)

The embodiment example and comparative example, wherein the cosmetic agent for skin is applied to 1) massaging cream, 2) facial pack, and 3) foundation powder, are shown along with the test result.

Embodiment Example 1A and Comparative Example 1B

Massaging cream

	Embodiment 1A (weight%)	Comparison 1B (weight%)
1. honey wax	3.0	3.0
2. stearic acid	1.0	1.0
3. cetanol	2.0	2.0
4. squalene	15.0	15.0
5. fluid paraffin	20.0	20.0
6. isopropyl palmitate	10.0	10.0
7. polyoxyethylene behenylether	1.5	1.5
8. polyoxyethylene sobitan oleate	2.5	2.5
9. glycerin monostearate	3.0	3.0

10. far-infrared radiating ceramics (admixture of SiO <sub>2</sub> and TiO <sub>2</sub> )	3.0	-
11. 1,3-butylene glycol	5.0	5.0
12. purified water	33.7	36.7
13. antioxidant	0.2	0.2
14. spice	0.1	0.1
Total	100.0	100.0

#### Manufacturing method

1) – 10) were heated, dissolved, dispersed, and kept at 75°C. Then, 11) – 13) likewise heated, dissolve, and kept at 75°C were added to them and agitated. The admixture was cooled while agitated, and when cooled to 50°C, 14) was added, agitated, and the entire admixture was cooled to a room temperature.

#### Embodiment Example 2A and Comparative Example 2B

##### Facial Pack

###### Embodiment 2A    Comparison 2B

	(weight%)	(weight%)
1. polyvinyl alcohol	13.0	13.0
2. refined water	52.7	57.7

3. 1,3-butylene glycol	2.0	2.0
4. polyethylene glycol (1500)	2.0	2.0
5. refined water	15.0	15.0
6. far-infrared radiating ceramics (admixture of TiO <sub>2</sub> , SiO <sub>2</sub> , and ZrO <sub>2</sub> )	5.0	-
7. ethyl alcohol	10.0	10.0
8. antioxidant	0.2	0.2
9. spice	0.1	0.1
Total	100.0	100.0

#### Manufacturing method

1) and 2) were heated and dissolved, into which 3) – 6) that were preliminarily dispersed and agitated were mixed. Subsequently, the admixture was cooled while agitated. At this point, the dissolved 7) – 9) that were cooled to 40°C were added, agitated, and cooled.

#### Embodiment example 3A and Comparative Example 3B (Foundation powder)

	Embodiment 3A (weight%)	Comparison 3B (weight%)
1. titanium oxide	5.0	10.0
2. talc	10.0	10.0

3. mica	63.0	63.0
4. nylon powder	2.0	2.0
5. ferric oxide yellow	1.0	1.0
6. ferric oxide red	0.5	0.5
7. ferric oxide black	0.1	0.1
8. far-infrared radiating ceramics (adixture of TiO <sub>2</sub> , ZrO <sub>2</sub> , and SiO <sub>2</sub> )	5.0	-
9. dimethyl polycyloxane	2.0	2.0
10. palmitate 2 – ethylhexyl	8.0	8.0
11. fluid paraffin	2.0	2.0
12. Vaseline	1.0	1.0
13. antioxidant	0.3	0.3
14. spice	0.1	0.1
Total	100.0	100.0

#### Manufacturing method

1)- 8) were put in a Hensel [transliteration provided] mixer, into which 9) – 14) that were heated and dissolved were added/mixed. They were all crushed, put into a metal plate, and pressure-molded.

## Test Result

Embodiment examples, 1A, 2A, 3A, and comparative examples, 1B, 2B, and 3B, were used by 15 women, and a feel of moisture, glow, and spread were evaluated based on the following standard. The result is shown in the table.

(Evaluation standard)

1. poor
2. slightly poor
3. average
4. good
5. very good

	1A	1B	2A	2B	3A	3B
Moisturized	5	3	4	3	4	2
Glow	4	3	4	2	4	2
Spread on skin	-	-	-	-	5	3

When a make-up was applied after using the cosmetic agent, the make-up was well attached to the skin, and a dark color is minimized making the skin look beautiful.

(Advantage)

As is evident from the aforementioned result, the cosmetic agent of the present invention does not cause undesirable stimulation to skin but improves blood circulation from inside the skin and activates metabolism. It produces much better effect than the prior art one, providing the skin with moisture and smoothness. Therefore, the cosmetic agent of the present invention is extremely effective to enhance beauty and health.

Translations

U. S. Patent and Trademark Office

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